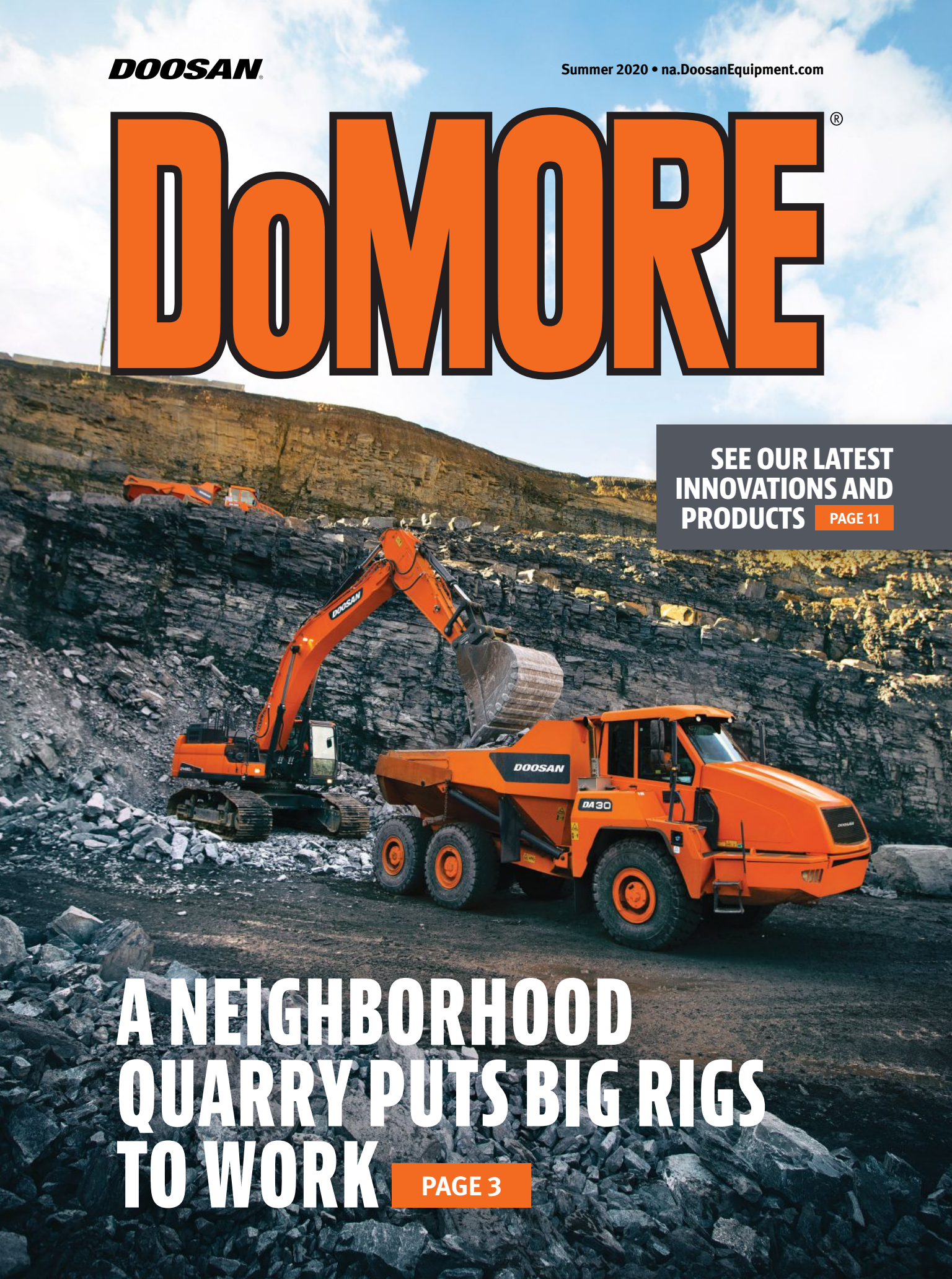


# DoMORE<sup>®</sup>

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TO WORK** **PAGE 3**





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# DOOSAN



## COMPANY INFORMATION

**Business:** Ratoskey & Trainor/Gill Quarries

**In business since:** 1992/2016

**Location:** Philadelphia, Pennsylvania

**Doosan equipment:** DL550-3 and DL300-5 wheel loaders; DX490LC-5, DX420LC-5, DX350LC-5, DX300LC-3, DX225LC-3, DX180LC-3, DX80R and DX35-5 mini excavators; and DA30-5 articulated dump trucks

**Doosan dealer:** Best Line Equipment

# YOUR NEIGHBORHOOD QUARRY

Of all the work Ray Trainor oversees — the drill blasting, the demolition, the recycling and excavating — one task never strays far from his mind: remaining a good neighbor.

Set in a neighborhood northwest of Philadelphia, Ray's company, Gill Quarries, mines six days a week while churning out recycled concrete, cut stone, rock products and more. Surrounded by rows of suburban homes, the quarry always shuts down by 4 p.m.,

and teams try to limit the digging on weekends.

"Our quarry is in a residential area," Ray notes. "We have to be very mindful of the people around us."

But there's always more to do. Staying on top of demand is the biggest challenge for Ray and his partner, Rob Ratoskey. The two also run a construction firm, Ratoskey & Trainor, requiring them to make the most of every daylight hour.

And that requires a diverse mix of equipment for their equally diverse work.

## FROM CONSTRUCTION TO QUARRY

The quarry business came later for Rob and Ray. The two launched Ratoskey & Trainor nearly 30 years ago with a focus on demo work. That inspired the purchase of a concrete recycling machine which, along with a concrete crusher, led the pair to start a recycled concrete business alongside the razing.

All that set the stage for a move into mining. When a nearby quarry became available for purchase in 2016, Ray says, they chose to "keep on building and growing."

That growth called for mine-ready machines built to withstand the rigors of quarry work. Ray and Rob turned to Best Line Equipment, their local Doosan dealer, whose sales specialist Armand Cencetti lived five minutes from their site.

*continued on page 4*





This partnership started far from home, though, at a jobsite in Delaware. A recycling firm years ago hired Ratonskey & Trainor for a job there, where Ray spotted an orange wheel loader. He hopped inside and liked what he found.

When Ray asked the machine's owner who sold it to him, he

heard a familiar name: Armand Cencetti. Ray remembered the name: Armand had been by his yard before so Ray called him and had a Doosan® wheel loader brought out the next day.

But the big business came with the quarry.

"That's when they got their DX420LC-5, DX350LC-5 and the DA30-5 trucks," Armand says. "Previously, I was selling them more DL250s, DX180LCs and DX225LCs. They definitely went to large-frame equipment when they bought the new property."

Best Line Equipment has sold 16 Doosan machines in all to Ratonskey & Trainor, including a DL550-3 wheel loader, two DX180LC-3 crawler excavators and a DX80R mini excavator. The company's fleet is now 90% orange, Armand says.

## PRODUCTIVITY IN THE PIT

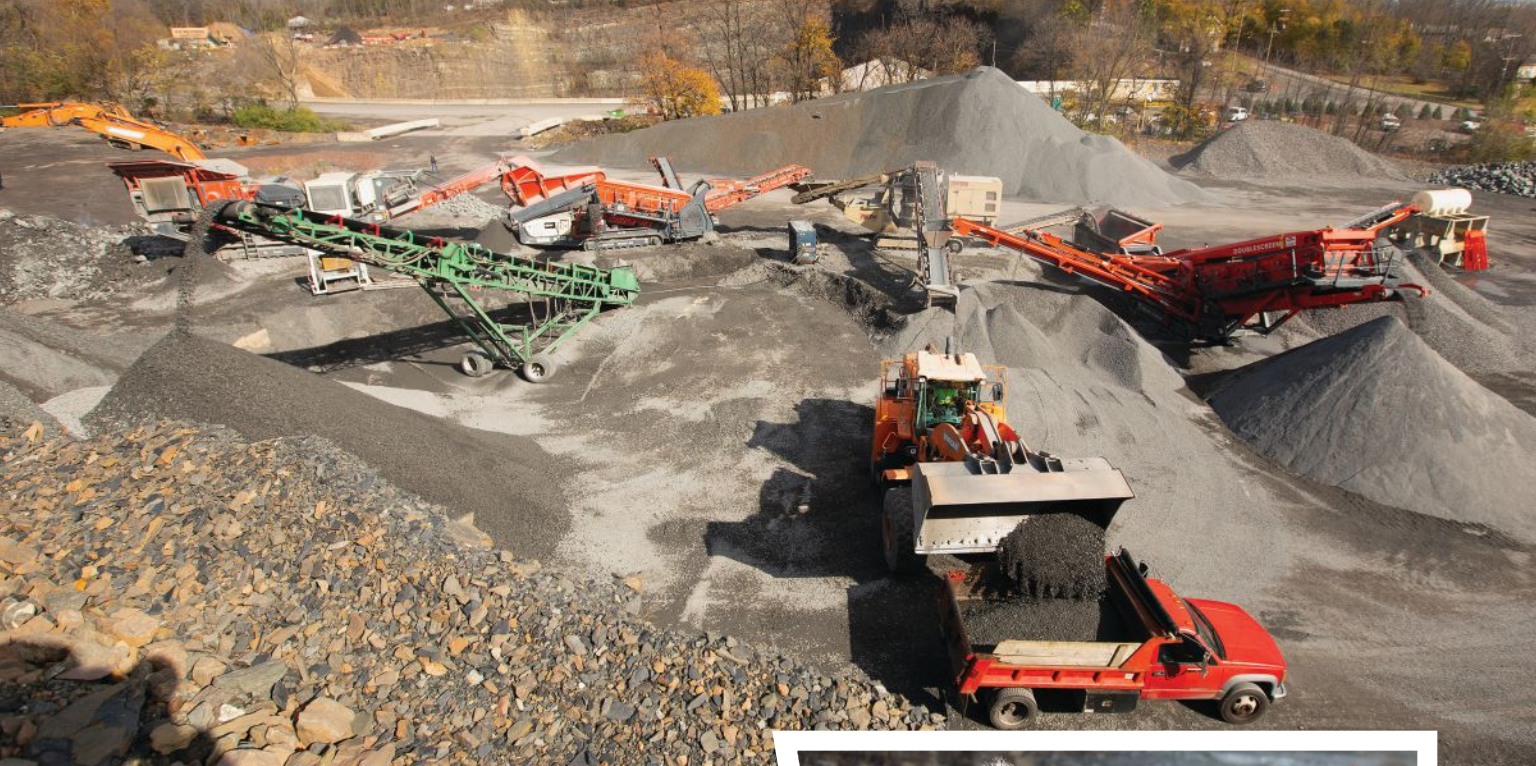
Ray and Rob's quarry contains argillite, a sedimentary rock used to make highways. And getting it from the ground takes a slew of heavy equipment. It starts with a bang as a controlled explosion in the quarry breaks the stone into manageable chunks.

Then, at the quarry floor, DX350LC-5 excavators with hydraulic breakers split up any larger rocks. Wheel loaders place the stone inside DA30-5 articulated dump trucks (ADTs) to transport it topside.

Once out of the quarry, a DX225LC-3 excavator dumps the stone into a crusher. Excavators both bigger and smaller are available for the job, such as the DX300LC-3 and DX180LC-3, but the







Ray Trainor (left) and Rob Ratoskey, owners of Gill Quarries

“  
OUR QUARRY MIGHT HAVE 800,000 TO A  
MILLION TONS OF RESERVE, SO EVENTUALLY  
RECYCLING WILL BE A LOT LARGER PART OF THE  
DAY-TO-DAY OPERATION OF THE QUARRY.

– **RAY TRAINOR** / Ratoskey & Trainor/Gill Quarries

mid-sized DX225LC-3 fits the bill perfectly, Ray explains.

“If we use the giant machine, you’d put one giant scoop in it and then you’d be sitting there for 10 minutes until the crusher did its business,” Ray says.

The DX225LC-3, however, “is the exact size for the reach and to handle what the bucket can hold.”

The excavator comes in handy later, too. When the crusher shuts down, Ray’s crew attaches a breaker to it to let the machine slam away on materials.

The crushed stone then gets mechanically screened into sizes approved for road construction by the Pennsylvania Department of Transportation. One size goes into highways. Another ends up beneath concrete. One fine grade is purchased for underground gas lines.

### FUEL SAVINGS

For maximum savings, Ray’s heavy machines run mostly in eco-mode — even the articulated dump trucks hauling tons of argillite. Unless an operation like hammering requires the extra oomph, Ray says, he’d always rather save fuel.

*continued on page 6*







“There’s a definite, noticeable fuel savings in eco with loading the crushers every day,” Ray explains. “You’re loading, and it’s all loose material so you don’t really need all that power.”

Beyond saving fuel, the firm also saves concrete from sanitary landfills. The recycling business at Gill Quarries has grown exponentially over the past few years, a trend Ray sees continuing.

“Our quarry might have 800,000 to a million tons of reserve, so eventually recycling will be a lot larger part of the day-to-day operation of the quarry,” he explains.

In its early days, Rob and Ray’s team would sell about 100 tons of recycled materials each week. That number’s now up to 1,000 tons a week. The recycled material can be used the same way as virgin material.

“It’s really catching on,” Ray says. “Eventually all we will sell as an aggregate is recycled material.”

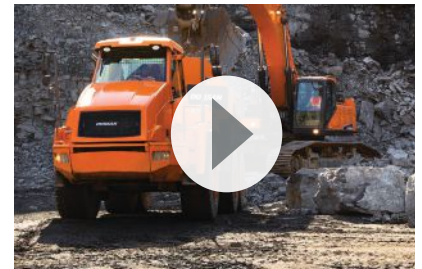
#### READY FOR THE FUTURE

As business partners, Rob and Ray have stayed open to change. In the early years, their business centered on residential jobs: demolishing houses, digging basements, septic and storm work — whatever needed doing.

Now, with the quarry operation and booming recycling work, the two remain open to whatever’s next. Ray and Rob employ around 40 workers between both businesses, taking crews throughout Pennsylvania and beyond.

“Wherever our customer base sends us, if we can go and help, we do,” Ray says.

Visit [na.DoosanEquipment.com](http://na.DoosanEquipment.com) to find that mix of Doosan equipment that works best for you.



Watch Ratoskey & Trainor put Doosan to work deep in its Pennsylvania quarry: [na.DoosanEquipment.com/RT](http://na.DoosanEquipment.com/RT)



Armand Cencetti, Ray Trainor and Rob Ratoskey

#### TRY IT OUT

Rob Ratoskey and Ray Trainor keep their Doosan dealer up to speed about their growing fleet needs. In fact, Best Line Equipment Sales Manager Armand Cencetti knows Rob and Ray’s business so well that he occasionally drops off a machine for them to demo unprompted. It’s almost always a hit. “It seems like whenever he sends something, it never goes [back],” Ray says. And the benefits of a tight-knit dealer relationship show up elsewhere, too, he says, including in service and repairs. “Everything they’ve ever said to me, I pretty much could take it to the bank.”



## COMPANY INFORMATION

**Business:** Foleyet Timber

**In business since:** 1963

**Location:** Timmins, Ontario

**Doosan equipment:** DX350LC-5 and DX300LC crawler excavators; DX300LL-5 log loader; DL420-3 wheel loader; DA30 articulated dump trucks

**Doosan dealer:** ReadyQuip Sales & Service Ltd.

# ROAD RULES

The logging industry has a long, rich history in the province of Ontario. Foleyet Timber, based in Timmins, Ontario, has been part of the Canadian logging industry for 56 years. Working exclusively for area sawmills, such as EACOM Timmins, Foleyet Timber harvests spruce, pine, balsam, poplar, aspen and birch trees that are processed into dimensional lumber for building decks, garages and homes.

Harvesting timber deep in the northern Ontario forests isn't an easy task. There's no infrastructure and there are no cell towers, no power lines and, in most instances, no roads to access the timber stand that is tenured for harvest.

Efficient, reliable machines are essential to the whole operation. For Foleyet Timber, those machines include a full line of Doosan® equipment — crawler excavators, articulated dump trucks, a wheel loader and a log loader.

## THE ROAD TO SUCCESS

Before tree felling can begin, Foleyet Timber must build temporary access roads to reach the designated plots of land where they've been contracted to clear the timber. Roads are built between May and October when the weather allows, and trees are harvested as the roads allow.

Lance Turgeon, a partner in Foleyet Timber, has been part of the logging business for

33 years. In that time, he has honed the company's process down to a science.

"We have a five-year contract, and we break that down by year," he says.

A forester creates perimeter lines to cut within, and Lance and his crew build roads to access the plot. And that's where the company's Doosan equipment comes in.

During his three decades in the business, Lance has used many equipment brands, but he has relied on Doosan since buying his first Doosan DX300LC crawler excavator in 2012.

*continued on page 8*





“

MY CYCLE TIMES ARE QUICKER  
BECAUSE I’M NOT STRUGGLING  
WITH MOVING TREE STUMPS. IT  
**MAKES US MORE EFFICIENT.**

– LANCE TURGEON / Foleyet Timber

”

“One thing about Doosan machines is they definitely don’t lack power,” he says. “I find them to be stronger than other brands.”

#### **STUMP TO DUMP**

Lance relies on Doosan machines from start to finish, or “stump to dump.” Doosan crawler excavators,





including the DX350LC-5 and DX300LC, start the process by subgrading for the access roads.

Once a path is cleared, the DX350LC-5 and DX300LC are used to grade the roadway, which often involves digging up and removing large tree stumps. It's a step that has been improved by the addition of the Doosan machines.

"My cycle times are quicker because I'm not struggling with moving tree stumps," Lance says. "It makes us more efficient."

A Doosan® DL420-3 wheel loader is stationed at the company's gravel pit to load gravel into two Doosan DA30 articulated dump trucks for hauling to the access roads.

Lance Turgeon (left), owner of Foley Timber

### "LIKE A FAMILY"

Lance Turgeon cares about his employees and takes pride in doing whatever he can to provide for them and their families.

"I am helping our employees' families," he says. "They all have children that they want to send to school. As long as I have a job, they have a job. Everyone is as important as the next person. Everyone is the same — we just do different tasks. We've been together so long that we're like a family. If someone has a project at home, we will all go together and do it with him. We are our own community."

"Our forestry equipment weighs more than 40 tons, so the gravel keeps it from sinking in the mud," he says. "We are known for our road structuring; we are pretty good roadbuilders."

Foley Timber favors gravel rather than asphalt or concrete for better sustainability of the forest land. Gravel allows the access road to return to a natural state so the forest can redevelop in that area.

*continued on page 10*





“We’re a renewable resource,” Lance says. “We harvest when the trees are ready. When the area is ready to be planted, we start over for the next generation.”

Once the road is accessible, large forestry cutting equipment — processors and a forwarder — is delivered to harvest the designated timber, typically about 20,000 cubic meters a month.

Once timber felling is complete, another Doosan machine, the DX300LL-5 log loader, is paired with a specialty grapple to pick up the harvested logs that have been placed along the access road and load them on the log trucks to be delivered to lumber mills for processing.

### COMFORT KEEPS OPERATORS IN THE BUSINESS

Lance says the logging industry competes with the mines in the area for quality employees. His industry requires five days away from home per week, compared to an 8-to-5 shift in the mines. Keeping operators comfortable on the job is essential for Foleyet Timber.

The company’s Doosan equipment comes standard with an enclosed cab with heating and air conditioning, which goes a long way to keep operators comfortable when working remotely.

“The operators tell you, ‘I want the orange machine,’” Lance says. “And they race to see who can get to the Doosan [machine] first to operate it for the day.”

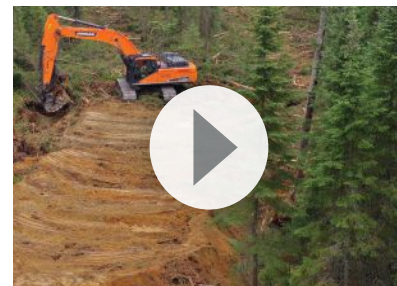
Lance prefers Doosan machines for their reliability. When the inevitable issue occurs, he knows he can count on the support he receives from his Doosan dealer, ReadyQuip Sales & Service Ltd. “Downtime is what kills you, and that’s where our dealer comes to the rescue,” he says. “The service we receive from them is second to none. It sets them apart.”

Lance says one way ReadyQuip Sales & Service goes above and beyond to keep Foleyet Timber productive is by creating what he calls “service kits.”

The kits include a list of Foleyet Timber machines, a timeline and description of service intervals for each machine,

plus parts, filters and other necessary components. The kits are packed up and ready for Lance’s crew to take along when they head out into the forest. The kits help minimize the time and expense of transporting machines several hours for service, and also help reduce downtime through regular maintenance.

That includes service that goes above and beyond, even delivering parts to the Foleyet Timber machines that could be hours away from the nearest town, on a road less traveled.



Watch Doosan equipment building the road less traveled in the Ontario forest: [na.DoosanEquipment.com/Foleyet](http://na.DoosanEquipment.com/Foleyet)





# SAY HELLO TO THE FUTURE: CONCEPT-X

In November 2019, Doosan Infracore introduced Concept-X, a comprehensive control solution for the construction site of the future, at its proving grounds in South Korea. This forward-thinking project is expected to be commercialized in 2025.

## CONSTRUCTION SITE SOLUTIONS

Concept-X is a comprehensive control solution that can be used to survey worksite topography via 3D drone scanning, establish operational plans based on the topographical data, and operate construction equipment such as excavators, wheel loaders and articulated dump trucks without humans at the controls. In short, Concept-X realizes the construction site of the future by having difficult construction work performed solely by equipment, leaving human personnel free to concentrate on more sophisticated analysis and management tasks.

## A WORLD FIRST

Although certain individual unmanned technologies have already been introduced in the field of construction machinery, our introduction of unmanned automation technologies to the entire construction site operation

process — ranging from surveying to the operation of construction equipment such as excavators and wheel loaders — is a world first.

Concept-X comprises a wide range of cutting-edge technologies such as image recognition, cognitive/control technologies, autonomous driving technologies, 5G remote control, 3D drone surveys, accurate workload estimation and assignment, and failure prediction technologies.

## THE FUTURE IS COMING

This jobsite solution will boost productivity and economic feasibility by reducing the time and costs required for construction equipment operations while continuing to make worksites safer.

Pending its commercialization, look for each of the abovementioned technologies — including drone surveying, cutting-edge data analysis, and unmanned construction equipment operations and control — to be released individually as soon as they are fully verified.

Visit [na.DoosanEquipment.com/Concept-X](http://na.DoosanEquipment.com/Concept-X) to learn more about this emerging technology.



## THE BUZZ ABOUT THE DS30

One highlight within Concept-X is the drone technology that will offer customers an aerial view of jobsites and a new level of data to manage and plan their best course of action.

The DS30 commercial drone — designed by Doosan Mobility Innovation — recently won the Best of Innovation award at the 2020 Consumer Electronics Show for the compact, lightweight hydrogen fuel cells designed to power the drone. This cutting-edge battery technology allows the DS30 to do long endurance flights — operating for up to two hours per flight, which exceeds previous limitations in the drone industry.





# PRODUCT SPECIFICATIONS



## ARTICULATED DUMP TRUCKS

		Payload		Body Capacity* Heaped		Rated Power Gross	
<b>NEW</b>	DA30-5	61,729 lb.	(28,000 kg)	22.0 yd <sup>3</sup>	(16.8 m <sup>3</sup> )	375 hp	(276 kW)
<b>NEW</b>	DA45-5	90,390 lb.	(41,000 kg)	31.9 yd <sup>3</sup>	(24.4 m <sup>3</sup> )	500 hp	(368 kW)

\* Without tailgate

## CRAWLER EXCAVATORS

	Operating Weight		Bucket Capacity Heaped, ISO/SAE		Rated Power Gross	
DX140LC-5	32,783 lb.	(14,870 kg)	0.48 yd <sup>3</sup>	(0.37 m <sup>3</sup> )	115 hp	(86 kW)
DX140LCR-5	34,987 lb.	(15,870 kg)	0.51 yd <sup>3</sup>	(0.39 m <sup>3</sup> )	115 hp	(86 kW)
DX170LC-5	38,376 lb.	(17,407 kg)	0.86 yd <sup>3</sup>	(0.66 m <sup>3</sup> )	131 hp	(98 kW)
DX180LC-5	43,224 lb.	(19,610 kg)	0.92 yd <sup>3</sup>	(0.70 m <sup>3</sup> )	131 hp	(98 kW)
DX225LC-5*	52,086 lb.	(23,626 kg)	1.20 yd <sup>3</sup>	(0.92 m <sup>3</sup> )	166 hp	(124 kW)
DX235LCR-5	56,019 lb.	(25,410 kg)	1.20 yd <sup>3</sup>	(0.92 m <sup>3</sup> )	189 hp	(141 kW)
DX255LC-5	57,752 lb.	(26,196 kg)	1.44 yd <sup>3</sup>	(1.10 m <sup>3</sup> )	189 hp	(141 kW)
DX300LC-5*	68,764 lb.	(31,191 kg)	1.66 yd <sup>3</sup>	(1.27 m <sup>3</sup> )	271 hp	(202 kW)
DX350LC-5	80,689 lb.	(36,600 kg)	1.95 yd <sup>3</sup>	(1.49 m <sup>3</sup> )	286 hp	(213 kW)
DX420LC-5	94,799 lb.	(43,000 kg)	2.49 yd <sup>3</sup>	(1.90 m <sup>3</sup> )	345 hp	(257 kW)
DX490LC-5	112,203 lb.	(50,894 kg)	2.80 yd <sup>3</sup>	(2.14 m <sup>3</sup> )	380 hp	(283 kW)
DX530LC-5*	116,576 lb.	(52,878 kg)	3.13 yd <sup>3</sup>	(2.39 m <sup>3</sup> )	380 hp	(283 kW)

**COMING THIS FALL**

DX800LC-7

Specifications will be available at the time of the product launch.

LC = Long Carriage LCR = Long Carriage Reduced Tail Swing \* = Super-Long-Reach (SLR) option available

## WHEEL EXCAVATORS

	Operating Weight		Bucket Capacity Heaped, ISO/SAE		Rated Power Gross	
DX140W-5	34,203 lb.	(15,514 kg)	0.73 yd <sup>3</sup>	(0.56 m <sup>3</sup> )	137 hp	(102 kW)
DX190W-5	43,431 lb.	(19,700 kg)	1.05 yd <sup>3</sup>	(0.80 m <sup>3</sup> )	174 hp	(129 kW)
DX210W-5	47,179 lb.	(21,400 kg)	1.12 yd <sup>3</sup>	(0.86 m <sup>3</sup> )	189 hp	(141 kW)

## MINI EXCAVATORS

	Operating Weight		Bucket Capacity Heaped, ISO/SAE		Rated Power Gross	
	DX35-5	8,193 lb. (3,716 kg)	0.13 yd³ (0.10 m³)		34 hp (25 kW)	
NEW	DX42-5K	10,114 lb. (4,588 kg)	0.19 yd³ (0.15 m³)		43 hp (31 kW)	
NEW	DX50-5K	11,486 lb. (5,210 kg)	0.20 yd³ (0.15 m³)		50 hp (37 kW)	
NEW	DX62R-3	13,799 lb. (6,259 kg)	0.23 yd³ (0.17 m³)		59 hp (44 kW)	
	DX63-3	13,799 lb. (6,259 kg)	0.23 yd³ (0.17 m³)		59 hp (44 kW)	
	DX85R-3	18,960 lb. (8,600 kg)	0.37 yd³ (0.28 m³)		59 hp (44 kW)	

NOTE — Where applicable, dimensions are in accordance with Society of Automotive Engineers (SAE) and ISO standards. Specifications and design are subject to change without notice. Pictures of Doosan equipment may show other than standard equipment. All dimensions are shown in inches. Respective metric dimensions are enclosed by parentheses. Doosan Infracore North America, LLC, equipment is manufactured with a Quality Management System that is in compliance with ISO 9001:2008. All dimensions are given for the standard configuration unless otherwise noted.





## WHEEL LOADERS

	Bucket Capacity Heaped, ISO/SAE		Tipping Load, Static Full Turn		Rated Power Gross	
DL200-5*	2.6 yd <sup>3</sup>	(2.0 m <sup>3</sup> )	18,620 lb.	(8,445 kg)	142 hp	(106 kW)
DL200TC-5	2.6 yd <sup>3</sup>	(2.0 m <sup>3</sup> )	16,625 lb.	(7,540 kg)	142 hp	(106 kW)
DL220-5*	3.0 yd <sup>3</sup>	(2.3 m <sup>3</sup> )	18,750 lb.	(8,505 kg)	160 hp	(119 kW)
DL250-5*	3.3 yd <sup>3</sup>	(2.5 m <sup>3</sup> )	21,186 lb.	(9,610 kg)	172 hp	(128 kW)
DL250TC-5	3.3 yd <sup>3</sup>	(2.5 m <sup>3</sup> )	20,723 lb.	(9,400 kg)	172 hp	(128 kW)
DL280-5*	3.7 yd <sup>3</sup>	(2.8 m <sup>3</sup> )	23,389 lb.	(10,609 kg)	172 hp	(128 kW)
DL300-5*	4.2 yd <sup>3</sup>	(3.2 m <sup>3</sup> )	29,939 lb.	(13,580 kg)	271 hp	(202 kW)
DL350-5*	4.8 yd <sup>3</sup>	(3.7 m <sup>3</sup> )	29,194 lb.	(13,424 kg)	275 hp	(205 kW)
DL420-5*	5.5 yd <sup>3</sup>	(4.2 m <sup>3</sup> )	35,550 lb.	(16,125 kg)	345 hp	(257 kW)
DL450-5*	6.3 yd <sup>3</sup>	(4.8 m <sup>3</sup> )	39,937 lb.	(18,115 kg)	345 hp	(257 kW)
DL550-5*	7.5 yd <sup>3</sup>	(5.7 m <sup>3</sup> )	47,675 lb.	(21,625 kg)	380 hp	(283 kW)
<b>NEW</b> DL580-5	9.0 yd <sup>3</sup>	(6.9 m <sup>3</sup> )	65,455 lb.	(29,690 kg)	380 hp	(283 kW)

TC = Tool Carrier \* = High-Lift (HL) option available

## LOG LOADERS

	Operating Weight		Swing Torque		Rated Power Gross	
DX225LL-5	68,784 lb.	(31,200 kg)	69,623 lbf.-ft	(9,626 kgf-m)	167 hp	(124 kW)
DX300LL-5	81,703 lb.	(37,060 kg)	87,787 lbf.-ft	(12,137 kgf-m)	271 hp	(202 kW)
DX380LL-5	113,538 lb.	(51,500 kg)	129,876 lbf.-ft	(17,956 kgf-m)	317 hp	(237 kW)
	Operating Weight		Bucket Capacity Heaped, ISO/SAE		Rated Power Gross	
DX225LL-5*	63,714 lb.	(28,900 kg)	1.2 yd <sup>3</sup>	(0.92 m <sup>3</sup> )	166 hp	(124 kW)
<b>NEW</b> DX300LL-5*	82,012 lb.	(37,200 kg)	2.1 yd <sup>3</sup>	(1.60 m <sup>3</sup> )	271 hp	(202 kW)
<b>NEW</b> DX380LL-5*	108,699 lb.	(49,300 kg)	2.4 yd <sup>3</sup>	(1.80 m <sup>3</sup> )	318 hp	(237 kW)

LL = Log Loader \* = Road Builder configuration

## MATERIAL HANDLERS

	Operating Weight		Max. Reach Ground		Rated Power Gross	
DX210WMH-5	57,200 lb.	(25,955 kg)	35 ft. 9 in.	(10,900 mm)	189 hp	(141 kW)
DX225MH-5	60,848 lb.	(27,600 kg)	35 ft. 5 in.	(10,800 mm)	166 hp	(124 kW)
<b>COMING THIS FALL</b> DX250WMH-5	Specifications will be available at the time of the product launch.					
DX300MH-5	79,366 lb.	(36,000 kg)	42 ft. 7 in.	(13,000 mm)	271 hp	(202 kW)

MH = Material Handler WMH = Wheel Material Handler

Visit [na.DoosanEquipment.com](http://na.DoosanEquipment.com) for more product specifications.



# NEW DOOSAN PRODUCTS

You have even more Doosan® models to choose from in 2020 as we introduce new machines across all our product lines, from mini excavators to our largest excavators and wheel loaders in North America.



## **DA45-5 ARTICULATED DUMP TRUCK**

Our new ADT model offers the same superior hauling as the DA40-5, now with a bigger maximum payload. The DA45-5 comes with extra features, including a real-time payload measuring system for enhanced productivity.

## **DX42-5K AND DX50-5K MINI EXCAVATORS**

DX42-5K and DX50-5K excavator updates enhance machine performance, reliability, versatility and operator comfort. Boost your productivity with mini excavator attachments, including couplers, buckets and clamps.



## **DX62R-3 MINI EXCAVATOR**

With a reduced tail swing, the new DX62R-3 mini excavator provides increased maneuverability and accessibility for excavation work in tight spaces. This new mini excavator is ideal for a wide range of jobs, whether in construction, landscaping or utilities.





**COMING  
THIS FALL**

## **DX800LC-7 CRAWLER EXCAVATOR**

Our biggest crawler excavator in North America, this machine is built for large-scale mining and quarry work. Once delivered to your site, the massive excavation boom and arm can load a huge amount of material in a hurry.



Learn more about these new Doosan machines at [na.DoosanEquipment.com](http://na.DoosanEquipment.com)

## **DL580-5 WHEEL LOADER**

Our largest wheel loader in North America offers big-time productivity. As a two-pass loader, the DL580-5 lets you fill a 15-yard truck in two passes instead of two-and-a-half or three like other models. That means more efficiencies in your pit and quarry work. Three aggregate buckets are approved for use with the DL580-5, from 8- to 10-cubic capacities.



## **DX300LL-5 AND DX380LL-5 ROAD BUILDERS**

Designed with forestry in mind, DX300LL-5 and DX380LL-5 road builders are built to clear a path so you can go where others haven't. These new models complement the current DX225LL-5 road builder, bringing you two bigger sizes for your bigger projects.



## **GET YOUR CUSTOMIZED DOOSAN MACHINE FASTER**

A new customization plant in Savannah, Georgia, means you can receive your new, specifically configured Doosan® equipment faster in the United States and Canada. A team of dedicated Doosan employees, including a manufacturing engineer, oversee the final assembly of equipment and inspections stateside. Equipment assembly at the facility includes crawler excavator track shoe changes, cab guarding, work lamps, beacons, counterweights, excavator dozer blades and more.

For more information, contact your local Doosan dealer.

**COMING  
THIS FALL**

## **DX250WMH-5 MATERIAL HANDLER**

New on the DX250WMH-5 material handler are two arm cylinders straddling the machine's boom and arm. This update improves the machine's performance and control of the material during the lift and placement cycle. A droop-nose arm continues to be standard, but Doosan is now offering an optional straight arm, which is akin to the company's excavator lineup.





# A DAY AT THE BEACH



In November 2019, Hayward Construction Group worked to restore Ponte Vedra Beach on Florida's Atlantic coast. Mark Hayward and his team used three Doosan® DA30-5 ADTs, two Doosan crawler excavators, a Bobcat® skid-steer loader and a dozer to haul approximately 1,000 loads of sand to build up the dunes for their oceanside community.



*Mark Hayward worked with Bobcat of Jacksonville to rent the Doosan machines for this project.*





## COMPANY INFORMATION

**Business:** Ziemke Farm Fresh Produce

**In business since:** 1990

**Location:** Zillah, Washington

**Doosan equipment:** DX225LC-5, DX180LC-5 and DX180LC-3 crawler excavators; DL250-5 wheel loaders

**Doosan dealer:** Feenaughty Machinery



# FRUITS OF LABOR

About 60 miles southeast of Mount Rainier, Washington, is the Yakima Valley, a scenic agricultural region known for its apple, wine and hop production. The Yakima Valley has the largest variety of fresh-grown produce in the Pacific Northwest because of local farmers and growers like Brad Ziemke, owner of Ziemke Farm Fresh Produce.

Farming wasn't Brad's first profession, but it's been a lifelong interest. After a few

years working at a lumber mill in Renton, Washington, he decided he needed a change. "I had been there for three years and was the second-highest-paid worker in the mill, but I felt like the lumber industry was going south and the job was a dead end to me," Brad says. "So, I ended up quitting."

Brad drove to Yakima, Washington, in his pickup truck, bought a bin of apples and cherries and started



selling fruit on the side of the road. In three short years, business was booming, and he had five produce stands throughout Seattle and Tacoma. Within a few years, though, he was having a difficult time getting farmers to supply his stands, so he decided to buy a farm to grow the fruit himself.

"Honestly, I was working myself to death driving back and forth between my stands," Brad says. "I decided that I enjoyed farming more than the stands, so I closed them and started exclusively farming."

Brad began farming a few acres as a hobby for himself and to

*continued on page 18*



provide produce for his friends and neighbors, but it quickly turned into a full-time business. Today, Brad has six employees and farms 150 acres of vegetables, including cucumbers, peppers and tomatoes, as well as fruits like apricots, cherries, peaches and nectarines. The produce is packed and sold directly from the farm to local grocery stores and produce stands around Idaho, Montana, Oregon and Washington.

### ADDING SERVICES

About five years ago, Brad wanted to find a way to keep his workers busy in the fall and winter months when the produce side of the business slowed down, so he decided to start offering orchard removal services to his friends and neighbors. Using an old excavator and dozer, the crews removed blocks of fruit trees to make way for new tree varieties and planting practices.

“There was a need for orchard removal in the area, and it’s really ballooned into something quite substantial,” Brad says. “We typically have five or six jobs going on every day.”

To keep up with his expanding business, which now runs almost year-round throughout eastern Washington, Brad decided to upgrade his heavy equipment fleet and met with

his local equipment dealership, Feenaughty Machinery.

“When we started looking for a new excavator, we looked at many manufacturers,” Brad says. “We don’t build roads or work in construction, so we had to have the right equipment for orchard removal. I was weary of trying a new brand since buying a machine is a sizable investment. However, when I came across the Doosan equipment brand, I took a chance. Now much of my equipment is orange. Orange has become my color — even my pickup is orange.”

Brad owns four Doosan® crawler excavators — two DX225LC-5, a DX180LC-5 and a DX180LC-3 — and two DL250-5 wheel loaders. He pairs the excavators and wheel loaders with attachments for efficient tree removal.

“When I started using Doosan equipment, I realized how much more productive I could be with a bigger machine,” Brad says. “I didn’t realize I needed a larger machine than the DX180LC-3, but since I bought the DX225LC-5s, it’s made my job a whole lot easier.”

Brad says that today they are one of the top orchard removal businesses in Washington,

distinguishing themselves from the competition by focusing solely on orchard removal — unlike other companies that may also do construction work.

“We’re really focused and have the right equipment for this process of orchard removal,” Brad says.

### PRODUCTION LEADS TO PROFIT

Since starting to use Doosan equipment, Brad has been able to easily keep up with the increasing demand. Most jobs span 10 to 20 acres and require only one machine.

“After bidding out a job, we go in and take the DX225LC-5 or DX180LC-3 equipped with a grapple attachment,” Brad says. “Our excavators can pull four to eight acres a day, depending on the size of the trees and the terrain. Plus, pairing the excavator with a grapple attachment allows me to pick up and carry three times the amount that I had been.”

On average, Brad and his team take out three or four rows of apple and cherry trees and roll them into one windrow, which is a line of material heaped



I DIDN’T REALIZE I NEEDED A LARGER MACHINE THAN THE DX180LC-3, BUT SINCE I BOUGHT THE DX225LC-5, **IT’S MADE MY JOB A WHOLE LOT EASIER.**

— BRAD ZIEMKE / Ziemke Farm Fresh Produce







up using a machine. Some of the trees are 70 years old with trunks three feet in diameter, requiring the extra oomph of Brad's largest excavator, the DX225LC-5.

Brad then uses the two DL250-5 wheel loaders to pick up the removed trees and transport them to a grind or burn pile. One wheel loader is equipped with an optional rearview camera for better visibility on the farm, while the other is designed with a high-lift option to easily load the material into high-sided trucks.

Once the crew moves the material to the grind or burn pile, they use another brand of equipment to rip out the roots and disk the ground, which is then ready to replant in summer.

Whether the crew burns or grinds the material is up to the orchard owner.

"Grinding is considerably more expensive for farmers," Brad says. "But there are no permits or regulations when grinding material. We can usually move and grind about 10 acres a day.

"However, there are some strict regulations on burning. We have to push, pile and burn and then come back 30 days later to remove the debris. Most of the time we

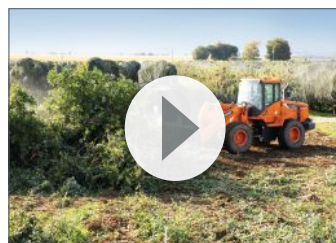
are grinding the material since it's more environmentally friendly."

Brad has developed a market for the ground material, which has allowed him to make grinding more affordable for orchard owners.

"It's the greener way to go," Brad says.

While orchard removal is the company's primary job, Brad also uses his equipment year-round on his farm.

"If you've got it, you use it. I do my own orchard removal, prepared ground for a greenhouse, and do irrigation pond work," Brad says. "I've been running Doosan equipment now for five or six years. I'm very happy, and that's why I keep going back."



Watch Brad Ziemke's equipment at work on an orchard removal project: [na.DoosanEquipment.com/Ziemke](http://na.DoosanEquipment.com/Ziemke)



## HANDS-ON DEMO

Brad Ziemke, owner of Ziemke Farm Fresh Produce, is a direct kind of guy when it comes to choosing his equipment. When he was in the market to buy a new excavator, his local equipment dealership, Feenaughty Machinery, decided to take him to the Doosan hands-on product testing and education site called the Real Operation Center — commonly known as The ROC — instead of bringing the machine to his jobsite for a demo.

"It really opened my eyes to what equipment Doosan has available," Brad says. "I was able to drive both bigger and smaller equipment. That's where I learned the 225 was probably as big as I'll need for my work, but if I ever have a need for other equipment, I'm definitely going to take a look at Doosan. It really impressed me."





“

WITH DOOSAN WHEEL LOADERS, WE HAVE TAKEN OUR BUSINESS TO THE NEXT LEVEL, **IT NOW TAKES ME SEVEN MINUTES TO LOAD A TRUCK, COMPARED TO TAKING 20 MINUTES WITH SMALLER WHEEL LOADERS AND A SIX-YARD BUCKET.**

– KYLE KING / Alternative Energy Products

”



# MULCH MADE EASY

## COMPANY INFORMATION

**Business:** Alternative Energy Products

**In business since:** 1989

**Location:** Nashville, Tennessee

**Doosan equipment:** DX225LC-5 crawler excavators; DL300-5, DL280-5 and DL220-3 wheel loaders

**Doosan dealer:** Bobcat of Nashville

Nashville is one of the fastest-growing cities in the United States, now boasting more than a half-million residents, according to the Nashville Business Journal. Alternative Energy Products is cashing in on the growth by using organic material to supply a much-needed commodity: mulch.

Started more than 30 years ago, Alternative Energy Products has grown to become the area's largest maker of mulch.

"We perform contract work in the city of Nashville and surrounding cities to grind trees into mulch," says Kyle King, grandson of the company's founder. "We are an alternative to the landfill, and we recycle wood and make products for beneficial reuse. We have about 400 customers now and haul 125 tractor-trailer loads per week during our busy season."

## WHY THE DEMAND?

It's simple. Mulch serves three main purposes: retaining moisture, regulating

soil temperatures and suppressing weeds. These are all practical and, in many cases, necessary features for landscapers — especially in communities with new housing.

Developers in the Nashville area can source local mulch from Alternative Energy Products to help homeowners who will need mulch around their homes, landscapes and trees. It serves a practical purpose by helping to minimize water consumption, a significant consideration in neighborhoods where homeowners are maintaining new landscapes.

It's not just residential neighborhoods that depend on mulch. Goods from Alternative Energy Products are used for top-dressing additives, erosion control, walking trails and International Play Equipment Manufacturers Association (IPEMA) certified playground material.

Trees grown in Middle Tennessee are the primary resource for the company's many products. In addition to harvesting trees, it works with local cities and towns to help clean up after storms leave many trees and branches behind. Instead of transporting these organic, recyclable materials to landfills to slowly decay, Alternative Energy Products is hired to remove the wood and take it to their facilities to be processed.

"When I first started four years ago, we weren't processing as much material, but now it doesn't stop," Kyle says. "As the company grew, we kept doing more and more work and our equipment couldn't keep up."

## HEAVY LIFTERS

Heavy equipment plays a big role in the mulching process, and that's why Alternative Energy Products decided it was time to upgrade from its old equipment. Today the company operates three facilities in the Nashville area, and dependable equipment is a must to sustain its growth. Company representatives met with the local Doosan equipment dealer — Bobcat of Nashville — to determine the machines critical to its future. The result: upgrading its fleet to include Doosan® crawler excavators and wheel loaders.

"My grandfather had built a relationship with the dealership for many years and decided it was the right fit for us," Kyle says. "It really came down to the warranty options, so he took the leap and it's been great."

Sales specialist Ryan Vaughn works closely with Kyle to provide guidance on equipment and attachment solutions.

"Ryan and the staff at Bobcat of Nashville are more personal than some other dealers," Kyle says. "They treat you as a friend instead of another company or just a

*continued on page 22*



Kyle King (left) and Ryan Vaughn



number. If we have something that needs to be serviced, or any issue, the dealer will be here super-fast to get it taken care of and get us back on track. They really understand the importance of not having our equipment down.”

With reliable Doosan® equipment and attachments, the mulching process has become simpler. When customers contact Alternative Energy Products for help disposing of trees, Kyle and his crew transport their Doosan DX225LC-5 crawler excavator, a DL300-5 wheel loader and a horizontal grinder to the site. There, the excavator is used to load trees into the grinder.



“Many of the city sites can be kind of tight, but the DX225LC-5 works out great since it’s so mobile and versatile,” Kyle says.

Excavator operators can easily switch between buckets thanks to the Doosan machine’s hydraulic quick coupler. An operator simply presses a button inside the excavator and swaps buckets in a

matter of minutes. Kyle and his operators pair the excavator’s bucket with a thumb to efficiently grab organic material and load it into the grinder.

Once the material is processed, the DL300-5 is paired with a large-capacity, light-material bucket to load the material into a truck for transporting back to the company’s yard.

Then, another Doosan wheel loader stockpiles the material. Eventually, it will be processed again through a separate grinder and then dried for approximately 48 hours before being colored.

“We manufacture 17 different products and a variety of blends of soil amendments and top dressing for landscapers and golf courses,” Kyle says. “Obviously, these stockpiles take up a lot of room. Our Doosan wheel loader can pull up to the material instead of us having to build a ramp like we had to for our previous machine. We are saving a lot of time.”

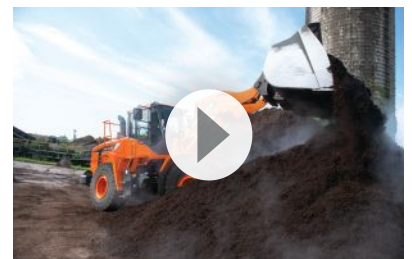
After coloring, the material ages on-site until it is ready to be sold, loaded and

distributed to area landscapers. In a sense, this completes the circle of putting the natural material back into the community.

Early success with Doosan machines has led to more purchases. Today, the company owns nine pieces of Doosan equipment, including a new DL280-5 high-lift model.

“With Doosan wheel loaders, we have taken our business to the next level,” Kyle says. “It now takes me seven minutes to load a truck, compared to taking 20 minutes with smaller wheel loaders and a six-yard bucket.”

Visit [na.DoosanEquipment.com](http://na.DoosanEquipment.com) and select the Wheel Loaders link under the Equipment header to learn more about Doosan wheel loaders.



Watch Doosan equipment in action at an Alternative Energy Products facility in Nashville: [na.DoosanEquipment.com/AEP](http://na.DoosanEquipment.com/AEP)



## REACHING HIGHER

Kyle King turned to sales specialist Ryan Vaughn for advice about getting more wheel loader lift height. Ryan came through with a high-lift iteration of the Doosan® DL300-5 wheel loader, which provides ample height to load organic material into trucks or grinding equipment. The high-lift model gives Kyle an additional 21 inches of dump height, making it possible to load the material more efficiently.



## COMPANY INFORMATION

**Business:** Moody Excavating

**In business since:** 2017

**Location:** Murfreesboro, Tennessee

**Doosan equipment:** DX350LC-5, DX300LC-5 and DX255LC-5 crawler excavators; DX85R-3 mini excavator; DL200-5 and DL200-3 wheel loaders

**Doosan dealer:** Bobcat of Nashville

# BOOMTOWN BUSINESS

Rusty Moody's dad built his construction business on the oil industry. Rusty built his on the back of another hot commodity: Amazon.com.

The tech giant's massive warehouse in Murfreesboro, Tennessee, helped drive a population boom southeast of Nashville, Rusty says. That meant a slew of new residential work for Moody Excavating, his equally booming business that grew from four employees to 32 in just three years.

"We do full commercial projects — everything but constructing the building," Rusty says of his team, which lays water, sewer and electric lines and puts the roads on grade in the new residential areas popping up everywhere. "In 20 years, I've seen this little town grow so much it's unreal."

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In 1998, Rusty moved to Murfreesboro from Oklahoma, where his dad constructed oil field sites back when “the Oklahoma economy was oil fields.” Years earlier, Rusty’s grandfather worked on flood control dams in the Sooner State. After his own run in the oil business, Rusty moved into construction.

In Tennessee, Rusty founded a firm with his brother that lasted 20 years before tragedy struck — a death in the family. As the company halted operations, Rusty considered retiring. But clients kept calling.

“The people we’d worked with for 18 years came to me and said, ‘Hey, I want you to do my work; we’ve got contracts,’” Rusty recalls.

That’s when Rusty’s adult children joined the family business — his new one, Moody Excavating, that is. Rusty’s son Jeffrey Moody works now as a project manager. Jeremy Moody is an engineer. And Christy Moody, his daughter, oversees the firm’s office.

The children added fresh energy to their father’s business. New software, too: maintenance and payroll files were digitized, and the firm began using GPS systems on jobsites.

“They brought me up to the 21st century, and that’s made all the difference in the world,” Rusty says. “Everything was on a hand ledger. Now it’s all computers. Same thing with the equipment.”

### LAYING IT ON THE LINE

Key to the company’s 21st-century successes are six Doosan® machines, including two DL200-5 wheel loaders and four crawler excavators from the DX255LC-5 to the DX350LC-5.

The machines operate on Moody’s three pipe teams: five-person crews, each with their own wheel loader and excavator. Once a new subdivision is placed on grade, the teams enter to lay water and sewer lines before the residential area’s roads get placed back on grade behind them.

“Then we start laying electric, lay curb and asphalt, backfill, clean up, collect the money and go home,” Rusty says.

These boomtown subdivision jobs roll out in six- to eight-month stretches as the subdivisions grow and grow. One such residential development, in nearby Smyrna, hired Rusty’s team for its initial phase in 2006. Its final phase just concluded this past summer.

Shelton Square, an expansive 148-lot local subdivision, put Moody Excavating in a tight spot: the development has just 40 feet of right of way for utilities (versus the typical 50 feet), necessitating a bit of Tetris to place the storm drain, gas, electric, cable and phone lines — each with its own depth and space requirements.

### NO “BIG FISH” NEEDED

Whether at Shelton or in Smyrna, the Moody family’s midsized machines fit their residential work to a T. Their crews don’t need “big fish equipment,” Rusty says. They don’t move millions of cubic yards of

“THE DL200-5 IS **BIG ENOUGH TO UNLOAD A BUNCH OF WIRE AND PIPE**, BUT **YET IT’S SMALL ENOUGH TO GET AROUND IN THE TIGHT AREAS** THAT I NEED TO GET INTO SOMETIMES.

— RUSTY MOODY / Moody Excavating







Jeffrey Moody (left) and Ryan Vaughn

## DON'T MISS THIS PART

Maintaining a Doosan® machine? Rusty Moody has a word of advice: Look for genuine Doosan parts, particularly when replacing a filter. “I use genuine parts, especially filters, because that is what they’re tested to, that is what they’re used to, and it’s what they recommend,” Rusty says. “So why would I want to use a filter when I don’t know if it’s going to perform like the one they’ve got?”

dirt at their jobsites, and the smaller-sized equipment reduces operating costs.

“You move up to the bigger equipment; you’ve got to have the bigger trucks,” Rusty says. “Bigger trucks are more money.”

Still, the work’s not for lightweights. The DX350LC-5 picks up 60-inch concrete pipes with ease, Rusty notes, and the

DL200-5 wheel loader is plenty versatile.

“The DL200-5 is big enough to unload a bunch of wire and pipe, but yet it’s small enough to get around in the tight areas that I need to get into sometimes,” Rusty says.

And with the Doosan hydraulic quick couplers, swapping out attachments for huge lifts doesn’t mean leaving the cab.

“Quick couplers is the only way to go, in my opinion,” Rusty says, calling them an obvious add-on for his equipment.

Doosan orange first appeared at Rusty’s worksites two years ago after Ryan Vaughn, a sales specialist for Bobcat of Nashville, walked into Rusty’s office with a promise: “Give me a shot: I’ll take care of you.”

And he did.

Rusty remains “extremely satisfied” with the service. Bobcat of Nashville’s parent company has a central dispatch center in the St. Louis area, and service trucks and technicians are dispatched from the dealership in Nashville to arrive at Moody’s Tennessee sites within a few hours.

## TENNESSEE-TOUGH EQUIPMENT

The machines are fuel-efficient, Rusty notes, and rugged too: the four excavators let crews dig confidently into the tough Tennessee soil. “In Tennessee, you have a lot of big rocks, and they try to get the rock out,” Rusty explains, adding that “You’re liable to rip a bucket in two.”

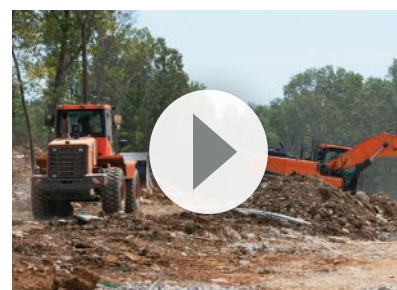
Unless it’s a Doosan machine, he adds. He has talked up Doosan to several of his

industry peers who now sport orange on their jobsites, too.

Rusty Moody’s company wouldn’t exist without his family. His father and grandfather inspired him, and his brother helped him launch his career in Tennessee. And with his kids’ help and some new tech (those six Doosan machines included), it’s family that will enable Moody Excavating to thrive long after Rusty retires — if he officially retires at all.

“He’s in here three days a week,” says Jeffrey Moody, Rusty’s son and project manager. “He’s never going to retire. We don’t want him to, either.”

Visit [na.DoosanEquipment.com](http://na.DoosanEquipment.com) to learn more about Doosan excavators and wheel loaders.



Watch Doosan equipment hit the jobsite with Moody Excavating in Tennessee: [na.DoosanEquipment.com/Moody](http://na.DoosanEquipment.com/Moody)





# STAY CONNECTED

Contact your authorized Doosan dealer to schedule a demo of DoosanCONNECT® Telematics, for help accessing it or for training on the system. Start uncovering ways to save money and improve your business with machine data today.

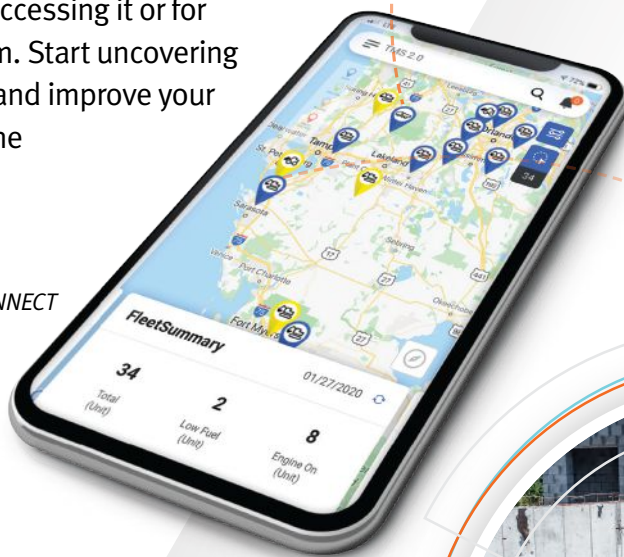
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